



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,113	12/22/2000	Junji Tajime	DP-699 US	7901

21254 7590 05/06/2004

MCGINN & GIBB, PLLC  
8321 OLD COURTHOUSE ROAD  
SUITE 200  
VIENNA, VA 22182-3817

EXAMINER

AZARIAN, SEYED H

ART UNIT PAPER NUMBER

2625

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/742,113

Applicant(s)

TAJIME, JUNJI

Examiner

Seyed Azarian

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-41, 43, 47 and 48 is/are allowed.
- 6) ☒ Claim(s) 1-3, 42 and 44-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/22/2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **RESPONSE TO AMENDMENT**

1. Applicant's arguments, filed 1/29/2004, see page 25 through page 29, with respect to the rejection of claims 1-5, 7,8,17,18,28,29,39,40,42-47 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Yogeshwar et al (U.S. patent 5,684,714).

### **Claim Rejections - 35 USC § 102**

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 42, 44-46, are rejected under 35 U.S.C. 102(b) as being anticipated by Yogeshwar et al (U.S. patent 5,684,714).

Regarding claim 1, Yogeshwar discloses a compressed moving picture re-encoding apparatus that has an input compressed moving picture stream, generated by compression encoding of moving picture data (see abstract and Fig. 6, column 6, lines 13-22, re-encoding digital video frames);

as an input signal, performs re-encoding at a pre-set average bit rate and at a variable bit rate, and has an output compressed moving picture stream whose bit rate has been changed as an

Art Unit: 2625

output signal, comprising (column 21, lines 25-38, encoded video at variable rate and changes in bit rate also see column 25, lines 52-66, computing average bit rate);

means for computing a quantizer step size that is used in said re-encoding; and means for inputting said computed quantizer step size, and the quantizer step size in said input compressed moving picture stream, and outputting a quantizer step size that is used in actual re-encoding (column 2, line 61 through column 3, line 4, calculating quantization value also see column 7, lines 10-26)

Regarding claim 2, Yogeshwar discloses a compressed moving picture re-encoding apparatus that has an input compressed moving picture stream, generated by compression encoding of moving picture data, as an input signal, performs re-encoding at a pre-set average bit rate and at a variable bit rate, and has an output compressed moving picture stream whose bit rate has been changed as an output signal, comprising means for computing a quantizer step size that is used in said re-encoding, means for inputting said computed quantizer step size, and the quantizer step size in said input compressed moving picture stream, and outputting a quantizer step size that is used in actual re-encoding (see claim 1, also column 37, lines 10-24, the maximum quantizer value).

Regarding claim 3, Yogeshwar discloses a compressed moving picture re-encoding apparatus that has an input compressed moving picture stream, generated by compression encoding of moving picture data, means for computing a quantizer step size that is used in said re-encoding; means for inputting said computed quantizer step size, and the quantizer step size in said input compressed moving picture stream, and outputting a quantizer step size that is used in actual re-encoding and means for applying weighting, according to image characteristics, to the

quantizer step size that is used in said re-encoding, and adjusting that quantizer step size (see claim 1, and Fig. 4, column 13, lines 16-29, adjusting the quantization).

Regarding claim 42, Yogeshwar discloses a compressed moving picture re-encoding apparatus according to claim 1, wherein a threshold setting is made for a prescribed plurality of quantizer step sizes with respect to an addition quantizer step size (column 41, lines 1-9, the bit estimate recalculated is used to recalculate the difference described above which is compared to a threshold).

Regarding claim 44, Yogeshwar discloses a compressed moving picture re-encoding apparatus according to claim 1, wherein a minimum value is set for said quantizer step size that is used in re-encoding (column 29, line 63 through column 30, line 4, re-encoding of the edit segment is an iterative process which estimates the minimum possible level).

Regarding claims 45 and 46, recites similar limitation as claims 1 and 2, are similarly analyzed.

### Allowable claims

4. The following is an examiner's statement of reasons for allowance.

5. The claim 4, is allowable due "re-encoding and means for computing a ratio of a complexity measures in a prescribed period or number of pictures to a complexity measure of an object of re-encoding, using either or both of the quantizer step size and a number of bits of said input compressed moving picture stream, performing weighting of said quantizer step size, and adjusting that quantizer step size".

6. The closest prior art of record (Yogeshwar) teaches a method and system for a user to manually alter the quality of a previously encoded video sequence. But does not teach or suggest

Art Unit: 2625

computing the respective complexity measures in two or more kinds of prescribed periods or numbers of pictures, using either or both of the quantizer step size and the number of bits of said input compressed moving picture stream and performing weighting of said quantizer step size, and adjusting that quantizer step size

7. These key features in combination with other features of the claimed invention are neither taught nor suggested by the art of record.

8. Claims 5-19, 43 and 47-48, recite substantial very similar limitations as claim 1 above and is allowed for the same reason.

9. Claims 4-41, 43 and 47-48 are allowed.

*Other prior art cited*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. patent (5,657,015) to Nakajima et al is cited for method and apparatus of rate conversion for coded video data.

U.S. patent (6,535,251) to Ribas-Corbera is cited for video encoder and method for adjusting quantization step in real time.

U.S. patent (5,956,686) to Takashima et al is cited for audio signal coding/decoding method.

U.S. patent (6,173,012) to Katta et al is cited for moving picture encoding apparatus and method.

U.S. patent (5,933,451) to Ozkan et al is cited for complexity determining apparatus.

**Contact Information**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Azarian whose telephone number is (703) 306-5907. The examiner can normally be reached on Monday through Thursday from 6:00 a.m. to 7:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached at (703) 308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR.

Status information about the PAIR system, see [http:// pair-direct.uspto.gov](http://pair-direct.uspto.gov). Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Seyed Azarian*  
*Patent Examiner*  
*Group Art Unit 2625*  
April 22, 2004

  
BHAVESH M. MEHTA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600